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AMAX
AMERICAN METAL CLIMAX, INC.

ANNUAL REPORT 1966



AMERICAN METAL CLIMAX, INC.

Incorporated in the State of New York in 1887
1270 AVENUE OF THE AMERICAS • NEW YORK, N.Y. 10020

FINANCIAL HIGHLIGHTS

FOR THE YEAR

	1966	1965
Net sales	\$572,580,000	\$475,020,000
Operating and other income	61,940,000	58,900,000
Dividend income	20,930,000	20,830,000
Net earnings after taxes	65,600,000	60,120,000
Per common share	\$4.33	\$4.00
Dividends declared	29,470,000	26,100,000
Per common share	\$1.90	\$1.675
Capital expenditures	78,370,000	71,400,000
Depreciation and depletion	22,170,000	17,480,000

AT THE YEAR-END

Working capital	\$216,910,000	\$210,970,000
Long-term debt (including current installments)	\$129,350,000	\$111,570,000
Shareholders' equity	\$387,920,000	\$349,960,000
Common shares outstanding	14,835,601	14,582,996
Number of shareholders	26,900	25,400
Preferred shares outstanding	329,451	409,802
Number of shareholders	1,200	1,400
Number of employees	14,300	12,900

The 1967 Annual Meeting of Shareholders of American Metal Climax, Inc. will be held May 4, 1967, in the theater of the Barbizon-Plaza Hotel, 101 West 58th Street, New York City, at 2:15 P.M. (E.D.S.T.). A formal notice of the meeting, together with a proxy statement and form of proxy, will be mailed to each shareholder during the first part of April, at which time management will request proxies.

1966 REPORT TO AMAX SHAREHOLDERS



Management Development. Fourteen graduate students selected for management training program tour United States Metals Refining Company plant in Carteret, New Jersey.

The year was one of growth and achievement marked by increased sales, and record earnings and capital expenditures.

Net earnings rose 9% to \$65,600,000, or \$4.33 a share, on sales of \$572,580,000. Demand for AMAX's principal products was at peak levels as a result of the high rate of industrial activity in the United States and abroad and the accelerated needs for raw materials for defense.

Fourth quarter earnings were \$17,800,000, or \$1.18 a share, and marked the fifteenth consecutive quarter in which earnings gained over the like period of the previous year.

Earnings from operations before taxes rose 18% above 1965. Dividend income from mining companies in which AMAX holds interests increased slightly to \$20,930,000, before United States taxes.

In 1966, AMAX completed the first major segments of its long-range expansion program and capital expenditures of \$78,370,000 were the highest in the Company's history.

In May, AMAX became a primary producer of aluminum when the Intalco plant, in which the Company has a 50% interest, went into initial operation. Located near Bellingham, Washington, the plant, which is designed for a total annual output of 228,000 tons, now has in production two pot lines with a capacity of 152,000 tons.

Construction continues on the lead mine-mill-smelter complex in Southeast Missouri in which AMAX has a 50% interest, and initial mining operations are expected by early 1968.

A major diversification step is AMAX's participation in a consortium to develop the vast Mt. Newman iron ore deposits in Western Australia. During the year, a new joint venture was arranged and sales contracts renegotiated to supply 100,000,000 tons of iron ore to the Japanese steel industry over a 15-year period beginning in 1969. In addition, Australian steel interests have agreed to buy Mt. Newman ore.

The Company maintains its position as the world's major producer of molybdenum and as such is a principal source of one of the few metals in which the United States is self-sufficient. AMAX has committed itself to a program to help satisfy the growing molybdenum demand.

The Company's program to increase its molybdenum capacity was partially met by inauguration of operations at a plant at Climax, Colorado, which allows recovery of molybdenum from oxide ores for the first time, and which it is anticipated will add some 3,000,000 pounds a year to capacity.

Development of the Urad, Colorado, mine continued on schedule. Initial production is planned for mid-1967 with an annual capacity of 7,000,000 pounds of molybdenum.

As announced previously, an evaluation of the Henderson molybdenum deposit near Empire, Colorado, is under way. Surface drilling and preliminary engineering studies indicate proven and probable reserves in excess of 230,000,000 tons of commercial grade ore, which would support a yearly production rate of 50,000,000 pounds of molybdenum.

The molybdenum conversion plant in Rotterdam, Holland, was completed and operations commenced in April, 1966.

In January, 1967, AMAX raised the prices of most of its molybdenum products by an average 3.7%.

In December, the Board of Directors approved the sale of the bulk of the Company's oil and gas properties in the United States and completion of the sale is expected by mid-1967. AMAX retains all of its Canadian properties and continues its participation in North Sea exploration.

Dividend income in 1966 from mining enterprises in Africa in which AMAX holds substantial interests continued at high levels. Dividends paid the Company by the Zambian copper producer, Roan Selection Trust Limited, for the fiscal year ended June 30, 1966, reached a new high. During the current fiscal year which began July 1, production has been affected by a strike and by a shortage of fuels for smelting and casting brought on by transport difficulties arising out of the Rhodesian situation. However, all refined copper produced has been shipped. Strenuous efforts are being made to continue the development of alternative and improved transport facilities and supplies of fuel. High foreign copper prices have offset the effects of higher transport costs and increased wages as well as the approximately 25% curtailment of production and shipments which began October 1. At Tsumeb and O'okiep, uninterrupted production has continued at high levels.

To meet the growing appetite for metals and minerals by the industrialized nations of the Free World, AMAX increased its efforts to find and develop deposits of raw materials that the Company now produces and new minerals with high growth potential.

The Company continued to cooperate with the Government in the program of voluntary restraints on overseas investment to reduce the United States balance of payments deficit. AMAX believes, however, that the mining industry is unique and that special provision should be made in the Govern-



New Molybdenum Source. Underground chamber at Urad, Colorado, mine will house ore crushing facilities. Mine is scheduled for initial production in mid-1967.

ment's balance of payments policies to provide this country with adequate supplies of raw materials for future needs. It is vital that United States minerals producers be encouraged to find and develop commercial mineral reserves regardless of geographic location. To restrict such development by investment regulation does not seem prudent either in the short or long-term view.

AMAX management also is concerned with changes in the tax laws that tend to discourage or postpone business decisions to develop raw material properties. Major expenditures over a period of years are required for exploration, test drilling, metallurgical research and mine development before a new property can begin to return income. An encouraging move by the Government in 1966 to recognize the problems of the mining industry was indicated by the revision of tax treatment for exploration expenses.

AMAX management shares with the public and Government the justifiable concern over air and water pollution and the need for better control procedures. The Company has a long history of progress in this field and has made a substantial effort to incorporate modern technology and equipment in plant design.

The new Intalco aluminum smelter, for example, has a \$9,000,000 air pollution control system that is considered the finest and most effective in the industry. The U.S.M.R. refinery in New Jersey has been a leader in air pollution control for many years and, since 1957, has invested more than \$4,000,000 in new control equipment and processes. The efforts made by these plants have been officially commended by community and government officials.

The Company believes that tax incentives on the Federal and local levels for investment in air pollution control facilities would accelerate the progress now being made by industry.

Because the future of AMAX depends on people as well as natural resources, products and markets, the Company recognizes the need for a planned program of development and growth of able men and women as a matter of sound business strategy.

Since issuance of the 1965 Annual Report, John P. Du Cane and the Hon. John B. Aird were elected Directors of the Company. Mr. Du Cane is a director and full-time executive of Selection Trust Limited, of London; Mr. Aird is a member of the Senate of Canada and a partner in the Toronto law firm of Edison, Aird & Berlis.

Frank B. Common resigned as a Director after nine years of service. Elmer N. Funkhouser, Jr., resigned as an Executive Vice President and Director of the Company. Lawrence J. Plym resigned as a Vice President, but continues as a Director and member of AMAX's Executive and Finance Committees. Frank X. White resigned as a Vice President.

H. A. Sawyer, Jr., President of Climax Molybdenum Company Division, and Stephen A. Furbacher, President of AMAX Aluminum Company Division, were elected Vice Presidents of the Company.



We wish to thank our shareholders, employees and customers for their continued loyalty and support which contributed so significantly to the Company's progress.

The report that follows describes more fully the activities and accomplishments of AMAX this past year.

Frank Coolbaugh
Chairman

Ian MacGregor
President

March 2, 1967

FINANCIAL REVIEW

EARNINGS AND DIVIDENDS

Net earnings in 1966 set a new record for the third consecutive year. The Company's earnings were \$65,600,000, or \$4.33 a share of common stock, an increase of 9% over 1965 net earnings of \$60,120,000, or \$4.00 a share. The improvement in 1966 net earnings came largely from operating profits. Dividends received from other companies in 1966 slightly exceeded the 1965 level.

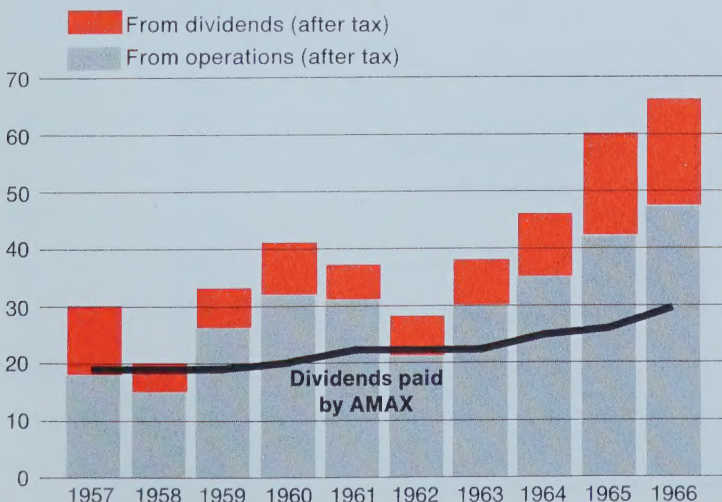
Dividends declared in 1966 amounted to \$29,470,000, an increase of \$3,370,000 over 1965. Dividends on common stock totaled \$1.90 a share compared to \$1.675 a share in 1965. The 1966 dividends were at the quarterly rate of 47½¢ a share, which was first paid in December, 1965, an increase of 7½¢ over the prior dividend level. Regular quarterly dividends of \$1.0625 were paid on the 4¼% convertible preferred stock.

Earnings from operations before taxes increased to a record of \$60,030,000, a gain of 18% over the previous high of \$50,780,000 set in 1965. The increase in earnings came primarily from AMAX Aluminum Company, base metals activities and molybdenum and associated metals operations. Earnings from the AMAX Chemical and Petroleum Division were below those of 1965. The ratio of earnings from operations to sales declined in 1966 to 10.5% from 10.7% in 1965, due primarily to higher operating costs and changes in the product mix of sales.

Earnings from other sources, before taxes and after deducting interest paid, amounted to \$22,840,000, a 21% decrease from the \$28,950,000 earned in 1965. Dividends from investments in other companies in which AMAX holds minority interests were \$20,930,000, as summarized on this page. Interest income and net profit on investments in 1966 amounted to \$8,030,000,

Net Earnings

(millions of dollars)



down \$4,360,000 from the 1965 period which included higher profits from the sale of investments.

DIVIDENDS FROM AMAX INVESTMENTS IN OTHER COMPANIES⁽¹⁾

	(In Thousands)	
	1966	1965
In Africa		
Roan Selection Trust	\$ 9,580	\$ 8,705
Tsumeb Corporation	7,495	7,505
O'okiep Copper Company	3,470	3,620
In Mexico		
Metalúrgica Mexicana Peñoles ⁽²⁾ . . .	—	625
Minera Frisco	150	150
Miscellaneous	235	225
Total before U.S. tax	\$20,930	\$20,830
Total after U.S. tax	\$18,780	\$18,030

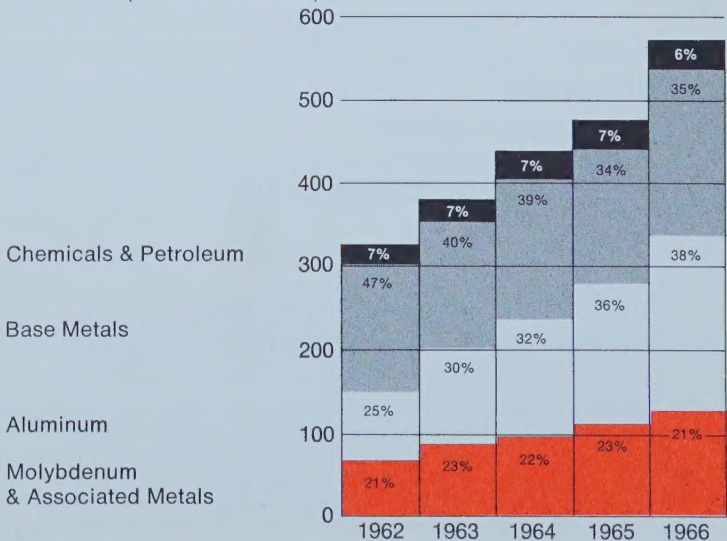
(1)The Company takes into earnings only dividends received from companies in which minority interests are held. AMAX equity in the earnings retained in their 1966 fiscal years by companies in which important minority interests are held is estimated to be 43¢ per AMAX common share, the same amount as was estimated for the year 1965.

(2)AMAX investment in Metalúrgica Mexicana Peñoles was sold in July, 1965.

Dividends received from AMAX holdings in the Zambian copper producer, Roan Selection Trust Limited, reached an all-time high, reflecting record production from the mines and record sales revenue for the year ended June 30, 1966. Dividend income from the Company's holdings in Tsumeb Corporation Limited, a copper-lead-zinc producer in the Territory of South West Africa, and in O'okiep Copper Company Limited, a copper mine in the Republic of South Africa, remained at approximately the same level as in 1965.

In the United States, the Copper Range Company again paid

Net Sales (millions of dollars)



a small cash dividend as well as a 3% stock dividend. Palabora Mining Company Limited, which operates a new copper mine and smelter in the Republic of South Africa, paid an initial dividend in November, 1966, after being in production only eight months.

SALES

Net sales in 1966, predominantly made in the United States, amounted to \$572,580,000. This was an increase of 21% over 1965 sales of \$475,020,000. Sales of products and services in 1966 were the highest in the Company's history for the fourth consecutive year (excluding sales applicable to the Company's agency businesses which were sold in 1963).

Sales of AMAX Aluminum Company products continued their growth, rising 27% over 1965. Base metal sales, which primarily include copper, zinc and by-product precious metals, increased 25%. Molybdenum and associated metals sales rose 11%. Sales of agricultural chemicals and petroleum products approximated their 1965 levels.

FINANCIAL POSITION

Working capital at the end of 1966 was \$216,910,000, an increase of \$5,940,000 during the year. Cash and short-term investments at December 31, 1966, totaled \$143,290,000, a decrease of \$42,360,000 from the end of 1965, which was caused

almost entirely by the repayment of short-term borrowings. Receivables, less allowances for doubtful accounts, were \$78,880,000 at December 31, 1966, up \$2,410,000 from the previous year-end and reflected the higher sales level. Inventories, which totaled \$78,350,000 at the end of 1966, increased \$4,220,000 during the year. A summary of the bases for valuation of inventories and the items included in inventories is shown on Page 26.

Notes payable of \$3,820,000 at December 31, 1966, represented borrowings due within one year. During 1966, current notes payable decreased \$41,720,000 because of the repayment of \$42,000,000 of interim short-term borrowings by AMAX Iron Ore Corporation. The increase in long-term debt from \$108,030,000 at the end of 1965 to \$125,530,000 at December 31, 1966, included borrowings of \$16,000,000 for additional aluminum facilities and \$5,000,000 for the construction of a lead mine and mill, less the retirement before maturity of \$4,000,000 in long-term notes payable. A summary of current notes payable and long-term debt appears on Page 26.

Investments in AMAX Credit Corporation and in 50%-owned companies totaled \$10,300,000 at the end of 1966, an increase of \$4,940,000 during the year. Effective in 1966, the carrying value of these investments was changed from cost to the Company's equity in the net assets as reported by these companies in their financial statements. Details of these

AMAX INVESTMENTS IN OTHER COMPANIES, at December 31, 1966

			(In Thousands)	
	Number of Shares	AMAX Equity	Cost	Market Value(1)
Listed Securities				
Roan Selection Trust Limited	9,736,479	45%	\$26,740	\$ 69,910
O'okiep Copper Company Limited	192,269	19	480	25,960
Copper Range Company	348,399	17	8,650	17,550
Canada Tungsten Mining Corporation Ltd.	1,750,000	35	1,210	2,280
Other			350	420
Total Listed			37,430	\$116,120
Unlisted Securities				
Tsumeb Corporation Limited ⁽²⁾	1,167,250	29	840	
Palabora Holdings Limited ⁽³⁾	(Loan and Equity)		2,300	
Canada Tungsten Mining Corporation Ltd.	(Note and Debentures)		2,380	
Minera Frisco, S.A.	(Loan and Equity)		1,760	
Other			1,600	
Total Unlisted			8,880	
Total Investments in other companies			\$46,310	

(1)The Company makes no representation that these values, which represent the closing quotations on December 31, 1966, could be realized in the event of a sale of these holdings. The estimated total market value of unlisted securities is substantially in excess of cost.

(2)While there was no quoted market price for Tsumeb Corporation shares, that corporation's earnings for its fiscal year ended June 30, 1966 of \$28,990,000 (\$7.25 per share) indicate that the Company's holdings in Tsumeb have a value substantially in excess of cost.

(3)The Company's indirect interest in Palabora Mining Company Limited, through Palabora Holdings Limited, amounts to 8%. The computed value of this interest based on market value of the underlying listed Palabora shares, plus the outstanding loan, amounted to \$28,440,000.

investments and the change in valuation adopted in 1966 are described in the notes on Page 26.

Investments in other companies in which AMAX holds minority interests amounted to \$46,310,000 at the close of 1966, compared with \$48,030,000 at the end of 1965. These investments are carried at cost which is substantially less than market value as shown in the table on Page 6.

Shareholders' equity at December 31, 1966, was \$387,920,000, an increase of \$37,960,000 over the previous year-end.

AMAX CAPITAL EXPENDITURES

Capital expenditures for property, plant and equipment in 1966 reached an all-time high of \$78,370,000 and exceeded by 10% the previous record expenditures of \$71,400,000 in 1965. During the past two years, capital expenditures were almost equal to the total amount spent during the prior seven years. Approximately 70% of the total 1966 expenditures was for expansion and modernization of the aluminum and molybdenum businesses.

Continuing its planned expansion program, the Company has under way major capital projects aimed at substantially increasing production of molybdenum, aluminum, copper, lead, zinc, metal powders and potash. Major expenditures will be required for these projects over the next few years and for the development of the iron ore properties in Western Australia, in which the Company has an interest.

CAPITAL STOCK

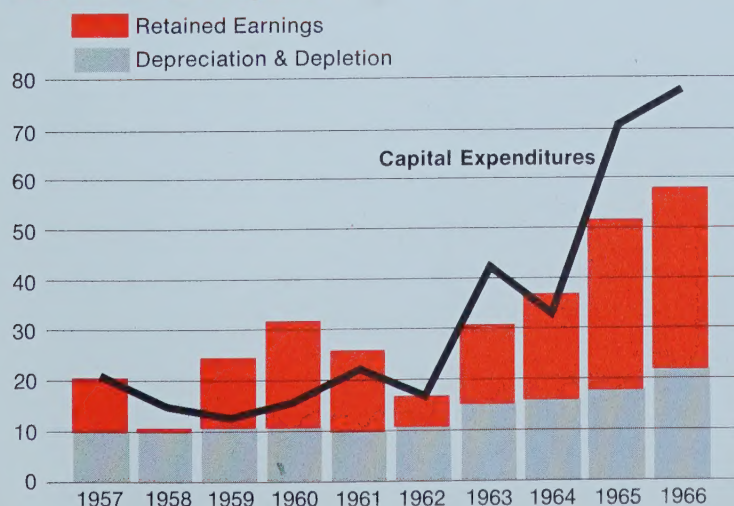
Shares of capital stock outstanding at the end of 1966 totaled 14,835,601 common shares and 329,451 of the 4¼% conver-

sible preferred shares, held by 26,900 and 1,200 shareholders of record, respectively. This represents an increase of 252,605 common shares and a decrease of 80,351 preferred shares during 1966. In addition, 28,300 common shares were held at year-end in the Company's treasury, a decrease of 14,800 shares during the year. The changes during 1966 resulted from the transfer from treasury of the 14,800 shares and the issuance of 36,953 new shares upon exercise of options under the stock option plans described on Page 27, and from the conversion of 80,351 preferred shares into 200,852 full common shares.

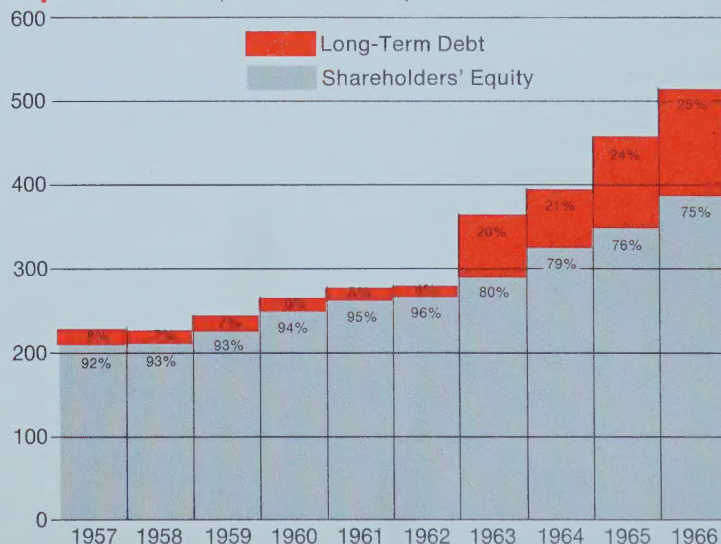
CHANGES IN WORKING CAPITAL

	(In Millions)	
	1966	1965
Working Capital January 1	\$211.0	\$188.2
Increases:		
Net earnings	65.6	60.1
Depreciation and depletion	22.2	17.5
Long-term debt	17.5	26.6
Common stock issued under stock option plans	1.8	2.1
Other additions	4.8	4.3
	<u>111.9</u>	<u>110.6</u>
Decreases:		
Dividends on preferred and common stock	29.5	26.1
Expenditures for property, plant and equipment		
Less retirements: 1966, \$5.1; 1965, \$7.0	73.3	64.4
Increase (decrease) in investments	3.2	(2.7)
	<u>106.0</u>	<u>87.8</u>
Net increase	5.9	22.8
Working Capital December 31	\$216.9	\$211.0

Capital Expenditures, Retained Earnings Depreciation and Depletion (millions of dollars)



Capital Structure (millions of dollars)



EXPLORATION AND MINE DEVELOPMENT

AMAX exploration activities in 1966 concentrated on those commodities which the Company now produces and sells. Molybdenum remained the principal exploration target, and drilling projects and geologic studies were carried out at many localities throughout the world. Activities included investigations of copper and zinc prospects in the United States and Canada.

Further exploration was carried out to test bauxite deposits found in 1965 near Port Warrender in the Kimberley district of Western Australia. The results were encouraging and indicated deposits of sufficient potential to justify substantial additional work. However, one or two more years will be required to complete exploration and evaluation.

AMAX exploration efforts also focused on other metals and minerals that fit into the Company's corporate capabilities and objectives. For example, heightened demand for nickel has led to new exploration efforts for this metal.

While principal exploration was in the United States, Canada and Australia, examinations also were undertaken in the Caribbean area, Europe, North Africa and the Near East. To serve as a base for these activities, regional offices are

maintained in New York and Denver; Toronto and Vancouver, Canada; Sydney and Perth, Australia; and Lima, Peru.

Mt. Newman Iron Ore Project

During 1966, further steps were taken to complete arrangements for the development of the Mt. Newman iron ore venture in Western Australia. The Broken Hill Proprietary Company Limited, Australia's principal steel producer, has acquired through its subsidiary, Dampier Mining Company Limited, a 30% interest in the venture. Pilbara Iron Limited, a subsidiary of The Colonial Sugar Refining Company Limited, has a like share. In early 1967, a 5% interest in Mt. Newman was sold to Selection Trust Limited, of London. AMAX's equity in the venture is reduced to 35% and is held through a wholly-owned subsidiary, AMAX Iron Ore Corporation. An additional portion of AMAX's interest in Mt. Newman may be sold.

Late in 1966, iron ore sales agreements were revised to provide for the delivery of Mt. Newman ore to eight Japanese steel mills on an accelerated basis. Production is scheduled to commence in 1969 and the contract was renegotiated to supply Japanese steel producers with 100,000,000 tons of iron ore in 15 years, instead of over a 22-year period as originally planned. The Broken Hill Proprietary Company Limited also contracted to take Mt. Newman ore.

AMAX will be responsible for ore sales outside Australia.

EXPLORATION AND MINE DEVELOPMENT DIVISION

John Payne, Jr., President

AMERICAN METAL CLIMAX, INC.

New York, New York
Denver, Colorado
Sucursal del Perú,
Lima, Peru

AMAX EXPLORATION, INC.

New York, New York
Webb City, Missouri
Toronto and Vancouver, Canada

UNITED STATES METALS REFINING COMPANY

Sydney and Perth, Australia

Mine Site. Aerial view at right shows development tunnel that extends 600 feet into heart of Mt. Newman ore body. The deposit is located in Pilbara region of Western Australia, 750 miles northeast of Perth.



MOLYBDENUM AND ASSOCIATED METALS

Sales of molybdenum, tungsten, uranium and vanadium by the Climax Molybdenum Company Division were at record levels in 1966, exceeding the previous high set in 1965 by approximately 11%. Higher production from the Climax, Colorado mine, coupled with increases in industrial activity in the United States and abroad, resulted in record domestic and international sales of molybdenum.

Molybdenum Market Trends

Estimated Free World consumption rose 11% to 111,000,000 pounds. In the United States, as steelmakers turned out a record 134,000,000 ingot tons, molybdenum consumption increased 13% to an estimated 60,000,000 pounds. Foreign consumption reached a new high of 51,000,000 pounds.

Even with the rapid growth in consumption, a marked improvement in molybdenum supply and an easing of recent shortages occurred in 1966 as a substantial increase in Free World mine production was augmented by the release of 9,000,000 pounds of molybdenum from the United States stockpile. Free World mine production rose to approximately 123,000,000 pounds, compared with 99,000,000 pounds in 1965. With an estimated 2,000,000 pounds from Sino-Soviet areas, total Free World molybdenum supply in 1966 was approximately 134,000,000 pounds, compared with 103,000,000 pounds in 1965.

As the supply situation improved, considerable rebuilding of inventory and supply pipelines took place in the United States and abroad. A continued improvement in molybdenum availability is anticipated in 1967 because of expected increases in mine production and less inventory rebuilding by consumers.

The national stockpile objective for molybdenum, which was 69,000,000 pounds at the beginning of 1966, has since been reduced to 40,000,000 pounds. The first reduction to 55,000,000 pounds, announced in March, 1966, by the Office of Emergency Planning, was followed by Congressional authorization for disposal of 14,000,000 pounds of excess molybdenum. During the year, 9,000,000 pounds of this excess were released for defense orders and to meet hardship requirements of

domestic consumers. Approximately 1,000,000 pounds more were scheduled for release during the first quarter of 1967.

In January, 1967, the Office of Emergency Planning announced a further reduction in the stockpile objective for molybdenum to 40,000,000 pounds and the Administration is consulting with industry on a long-term disposal plan prior to requesting Congress to authorize sale of the additional 15,000,000 pounds of surplus molybdenum.

On January 11, 1967, the Climax Division raised the prices of most of its molybdenum products by an average 3.7%. Prices of molybdenum metal mill products, used predominantly for military applications, were not changed.

Molybdenum Operations

The Climax, Colorado, mine produced a record tonnage of ore in 1966 as it continued operations around-the-clock, seven days a week. A total of 15,200,000 tons of ore was mined (an average of approximately 42,300 tons per day), which exceeded the previous high of 14,350,000 tons set in 1965. Molybdenum production was 56,300,000 pounds, approximately 12% above 1965 output of 50,300,000 pounds.

While the full extent of the ore body has not been fully defined, the current proven ore reserves of the Climax mine, commercially mineable under present economic conditions, are calculated at 420,000,000 tons, sufficient to sustain the present scale of mining for approximately 30 years.

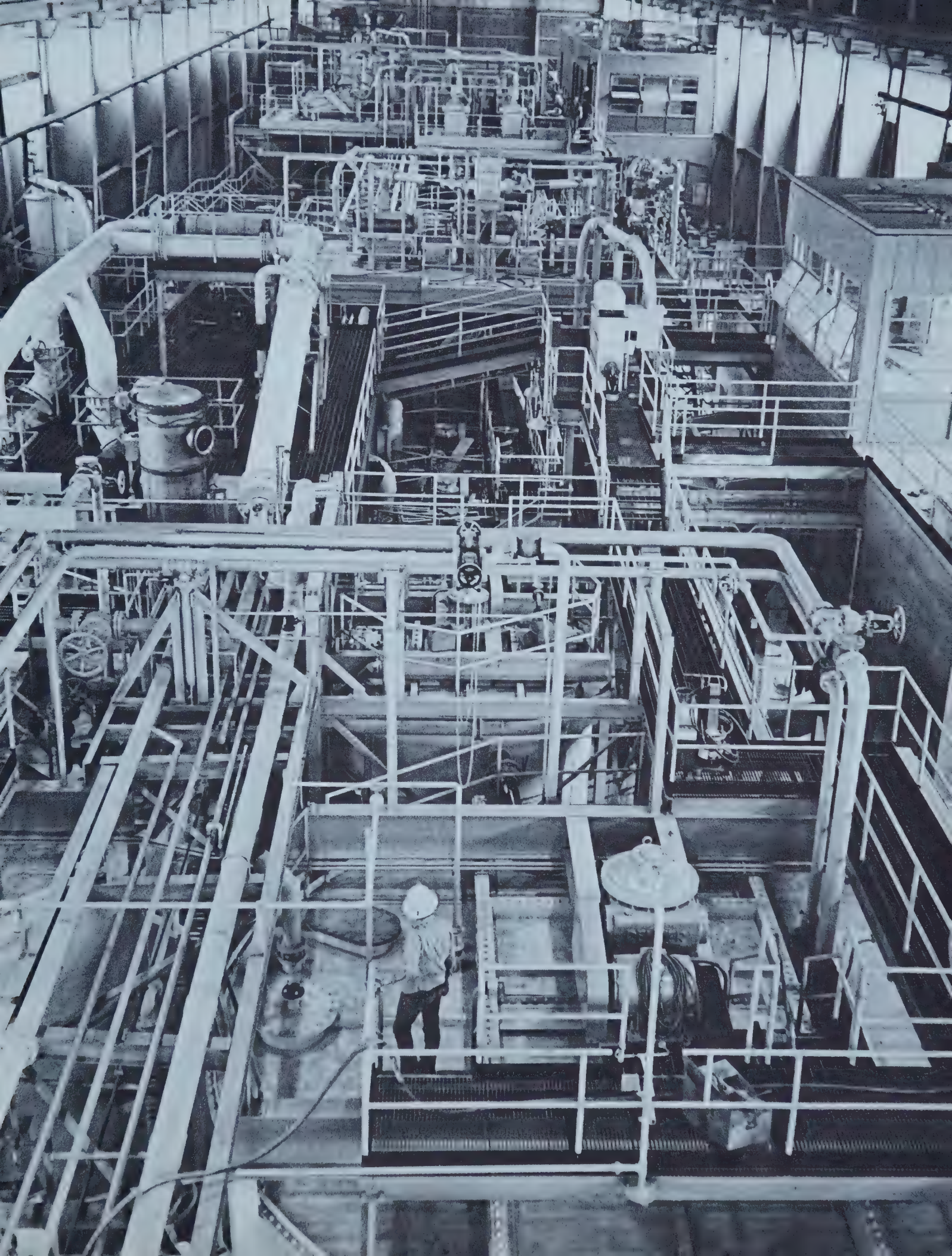
Production at the Langeloth, Pennsylvania, molybdenum conversion plant exceeded the previous high of 1965. In addition to increased production of AMAX's own material, molybdenum released from the United States stockpile was converted into usable product form at Langeloth for consumers receiving allocations from the Government. Work continued on a United States Government contract to upgrade about 3,500,000 pounds of molybdenum in the United States stockpile from molybdenite concentrate to ferromolybdenum.

Refractory Metals

Sales of refractory metal products increased. Demand for arc-cast molybdenum mill products for non-military industrial applications rose while shipments for military applications continued at about the 1965 level.

The market for Climax's high density, gas-free pellets of pressed and sintered molybdenum powder increased due

New Plant at Climax. Ore treatment plant (right) utilizes new process developed by AMAX to recover molybdenum from oxide ores for first time. Complex recovery process requires 130 miles of electrical wiring, 14½ miles of piping.



to accelerated demand from producers of vacuum-melted, low-iron superalloys that are used in high-powered aircraft gas turbines.

Expansion of Facilities and Services

A major expansion is under way to increase the Climax Division's molybdenum capacity by 1970 to about 40% greater than 1965 capacity. Capital expenditures by the Division in 1966 were approximately \$24,000,000 and the following projects were completed or are well under way:

Construction was completed and production began at the \$20,000,000 facility at Climax to recover oxidized molybdenum from the ore for the first time. The plant is designed for an annual capacity of 3,000,000 pounds of molybdenum.

Work continued on the third mining level scheduled for production in the early 1970's when the Phillipson level will approach exhaustion.

Two new ball mill units were completed to handle the higher tonnages of ore being processed at Climax.

Development work and construction at the Urad, Colorado, molybdenum mine continued on schedule. Approximately \$25,000,000 is being spent to develop the mine, located 70 miles northeast of Climax. Initial production is scheduled for mid-1967 with an estimated annual capacity of 7,000,000 pounds at full operation.

Operations began in April, 1966, at the new \$4,500,000 Rotterdam, Holland, conversion plant. This modern, highly-automated plant has the annual capacity to convert approximately 12,000,000 pounds of molybdenum from concentrate to technical molybdic oxide. The new facility, and the establishment of sales offices in Paris, London and Düsseldorf, make possible the sale of finished molybdenum products directly to European consumers and provide for technical and commercial services similar to those in the United States.

Henderson Deposit

Evaluation of the Henderson molybdenum deposit near Empire, Colorado, has to date indicated proven and probable reserves in excess of 236,000,000 tons at a grade of 0.45% MoS_2 . Continued drilling is expected to increase this reserve estimate and a 23-foot diameter shaft is being sunk to a depth of 2,350 feet for access to the ore body in order to obtain necessary data for mining plans and cost estimates.

Engineering studies, based on a mining rate of 30,000 tons of ore per day, suggest a production rate of approximately 50,000,000 pounds of molybdenum annually. Assuming favorable conclusions of these studies, it is anticipated the mine could be brought into production in the early 1970's.

Market Development and Research

Research into new and increased uses of molybdenum and associated metals accelerated in 1966 with major emphasis centered on the contributions molybdenum can make to improve iron and steel alloys. Research efforts also provided support for expanded molybdenum usage in the chemicals, catalysts and lubricants markets.

Molybdenum is used increasingly in sophisticated materials that make optimum use of the metal's contributions to strength and toughness, resistance to wear and corrosion,



Production Milestone. 1966 marked production of the one-billionth pound of molybdenum from the Climax mine since it went into operation fifty years ago. Above, crushed molybdenum ore moves along conveyor belt in Climax mill for further processing.

and strength retention at elevated temperatures. These materials cover a broad spectrum:

- Super-strength, heat-treated structural steels, many of which contain 0.20%-0.50% molybdenum, are replacing ordinary unalloyed structural steel.
- Ultrahigh-strength steels, containing up to 8% molybdenum, are one of the more promising developments in ferrous metallurgy.
- High-temperature materials, containing up to 10% molybdenum, are being used increasingly in jet engines, central-station power plants and oil refineries.

Demand is also increasing in such chemical end uses as corrosion inhibiting pigments, catalysts for oil refining and synthetic fiber production, and in lubricants.

TUNGSTEN

Recovery of by-product tungsten at the Climax mine increased to 1,300,000 pounds in 1966, up from 1,180,000 pounds in 1965. Tungsten sales improved over 1965.

In December, 1966, a fire destroyed the mill facility at the Canada Tungsten mine (35% AMAX-owned), located in the Northwest Territories of Canada. Immediate steps are under way to rebuild the mill.

Estimated Free World Molybdenum Consumption

	United States	Foreign	Total	AMAX Production of Molybdenum At Climax Mine
	(Millions of pounds of molybdenum)			
1966 ⁽¹⁾	60	51	111	56
1965	53	47	100	50
1964	46	44	90	47
1963	42	37	79	47
1962	38	32	70	33 ⁽²⁾
1961	35	41	76	48

(1) Preliminary

(2) Production limited by strike

Estimated Uses of Molybdenum in the Free World by Major Industrial Categories

	1966
Alloy steel (other than stainless and tool steels)	43%
Stainless steel	19
Tool steel (including high-speed steel)	11
Cast iron and steel-mill rolls	9
Chemicals and lubricants	7
Superalloys	6
Molybdenum metal	4
Miscellaneous	1
	100%

Note: AMAX estimates

URANIUM AND VANADIUM

Climax Uranium Company—Sales of uranium and vanadium, produced by Climax Uranium at Grand Junction, Colorado, were under the 1965 level, although the market for co-product vanadium has strengthened over the past few years and prices for the metal have improved.

The Company's uranium delivery contract with the Atomic Energy Commission expired at the end of 1966, but during the year the outlook for uranium improved and there was a sharp increase in contract awards for commercial nuclear power plants. In 1966, Climax Uranium reached agreement to supply to a nuclear reactor manufacturer the bulk of its uranium production over the two-year period 1967-68.

In view of the rapid growth of nuclear power, AMAX has increased uranium exploration in the Western United States.

ZIRCONIUM AND HAFNIUM

Carborundum Metals Climax, Inc. (50% AMAX-owned)—Originally a producer of zirconium sponge and ingots, an expansion program was undertaken to install facilities to produce zirconium seamless tubing, plate and sheet used for nuclear reactors.

The rolling mill and first phase of the tube producing facilities are now in operation and orders have increased for plate and sheet as well as seamless tubing.

CLIMAX MOLYBDENUM COMPANY DIVISION

H. A. Sawyer, Jr., President

CLIMAX MOLYBDENUM COMPANY

NEW YORK, NEW YORK

Western Operations

Golden, Colorado

Molybdenum Mining

Climax, Colorado

Urad, Colorado

Molybdenum Conversion

Langeloth, Pennsylvania

Rotterdam, Holland

Refractory Metals Production

Coldwater, Michigan

Refractory Metals Sales and Service

Ann Arbor, Michigan

Research

Ann Arbor, Michigan

Golden, Colorado

URANIUM AND VANADIUM MINING AND MILLING

Climax Uranium Company

Grand Junction, Colorado

DOMESTIC SALES AND SERVICE

Climax Molybdenum Company

New York, Chicago, Dayton,

Denver, Detroit, Los Angeles,

Pittsburgh

INTERNATIONAL MARKETING AND DEVELOPMENT

Climax Molybdenum Company Limited

London, England

Climax Molybdenum S.A.

Paris, France

Climax Molybdenum Company

Zurich, Switzerland

Climax Molybdenum G.m.b.H.

Düsseldorf, Germany

Climax Molybdenum Development Company

(Japan), Limited

Tokyo, Japan

INTERNATIONAL SALES SERVICE

Equipamentos Industriais EISA Ltda.

São Paulo, Brazil

Railway & Power Engineering Corporation Limited

Montreal, Canada

Nichibei Boeki Company, Limited

Tokyo, Japan

Samuel Osborn (South Africa) (Pty.) Limited

Johannesburg, South Africa

Metal Distributors Limited

Bombay, Calcutta,

Madras and New Delhi, India

ALUMINUM

Sales of the AMAX Aluminum Company Division increased 27% to record levels in 1966, and all units posted gains.

Market Trends in Aluminum

For the fifth consecutive year, demand for aluminum rose to a new high, and shipments of ingot and mill products in the United States increased over 10% to about 4,500,000 tons, outpacing the growth rate of other major metals.

Fabricated product prices strengthened in the United States. In January, 1967, domestic producers raised ingot prices by ½¢ a pound, to 25¢, and initiated an increase in fabricated product prices of ½¢ to 1¢ a pound.

In the opinion of AMAX Aluminum management, fabricated product price increases were long overdue. Without such improvement it is difficult to generate the capital needed for expansion of facilities to meet growing demand.

Organizational Changes

AMAX Aluminum Company made a number of changes in order to group activity along product lines and to identify its widespread operations:

- AMAX Aluminum Mill Products—produces and markets sheet, strip, plate, irrigation tubing and mobile home components (formerly under Hunter Engineering Co. Division).
- AMAX Aluminum Building Products—produces and markets aluminum siding, roofing, shingles, and Sun Valley® residential sliding doors.
- AMAX Aluminum Extrusion Products—produces and markets custom extrusions.
- Kawneer Company—produces and markets architectural and industrial aluminum products.
- Johnston Foil—produces and markets aluminum, tin and lead foil.
- Apex Smelting Co.—produces primary and secondary aluminum alloys and zinc alloys for the foundry and die casting industries, and silicon metal.
- Hunter Engineering—designs and produces machinery for forming and finishing ferrous and nonferrous metals.
- International Division—operates, or has interests in, aluminum fabricating plants in five nations.

AMAX GROWTH IN ALUMINUM

Intalco (50% AMAX-owned)—AMAX Aluminum became an integrated producer in 1966 when the Intalco primary aluminum reduction plant near Bellingham, Washington, went into production. Designed for a total annual capacity of 228,000 tons, Intalco now has two pot lines in operation with a capacity of 152,000 tons. AMAX takes 50% of the output.

Other expansion activities in 1966:

- AMAX Aluminum Mill Products plant at Riverside, California, increased capacity to achieve better product balance.
- Apex Smelting Co. Cleveland plant began a modernization and expansion program, expected to result in a 25% increase in the production of secondary alloys and a reduction in operating costs.
- AMAX Aluminum Extrusion Products began construction of a new custom extrusion plant at Hernando, Mississippi.
- In Mexico, the Alumex, S.A. de C.V. plant owned by AMAX and American & Foreign Power Company, Inc., began production of sheet and sheet products. In January, 1967, American & Foreign Power purchased a 50% interest in AMAX's Kawneer de México, S.A. de C.V., a producer of architectural aluminum products. Following the transaction, Kawneer de México began construction of an extrusion plant in Puebla, Mexico, which is expected to be in operation in late 1967.
- In Australia, Kawneer Company Pty. Limited, an aluminum fabricating company 53%-owned by AMAX, began construction of facilities to double manufacturing capacity.
- In the United Kingdom, AMAX and McKechnie Brothers Limited formed MACKAMAX Aluminium Limited to produce aluminum extrusions and architectural products. A new extrusion plant is under construction and is expected to be in operation in late 1967.

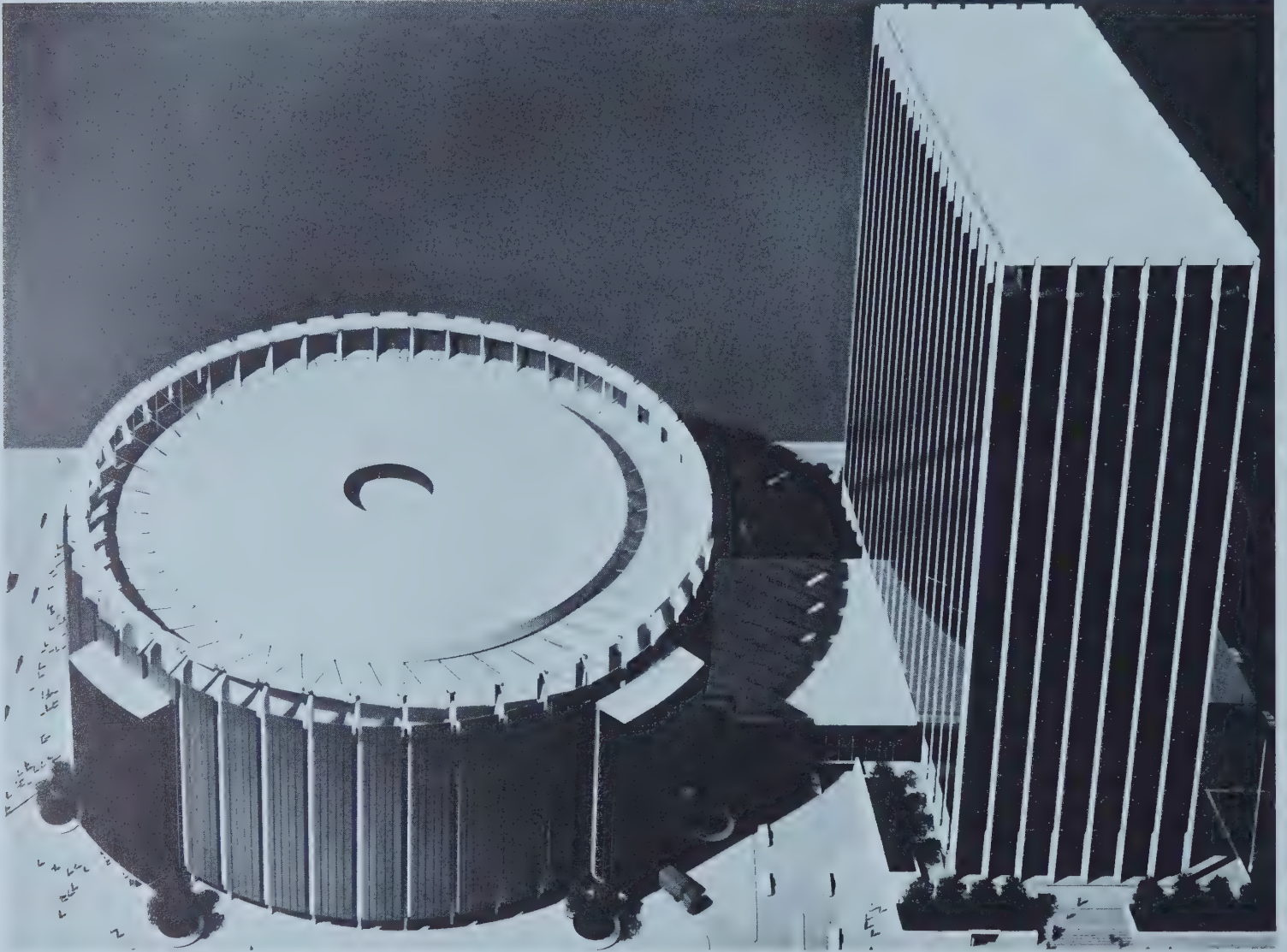
Product Development

AMAX is among the leaders in the growing trend to painted and anodized color finishes for aluminum. A hard color finish, Permanodic®, developed by Kawneer, has accelerated demand for its architectural products, particularly ornamental

Intalco. Long rows of pots, or electrolytic cells, in which primary aluminum is produced. Half of plant's present annual production of 152,000 tons goes to AMAX Aluminum fabricating plants.



Application. *New Madison Square Garden Center under construction in New York City (below) will contain more than 1,250,000 pounds of architectural aluminum products supplied and installed by Kawneer.*

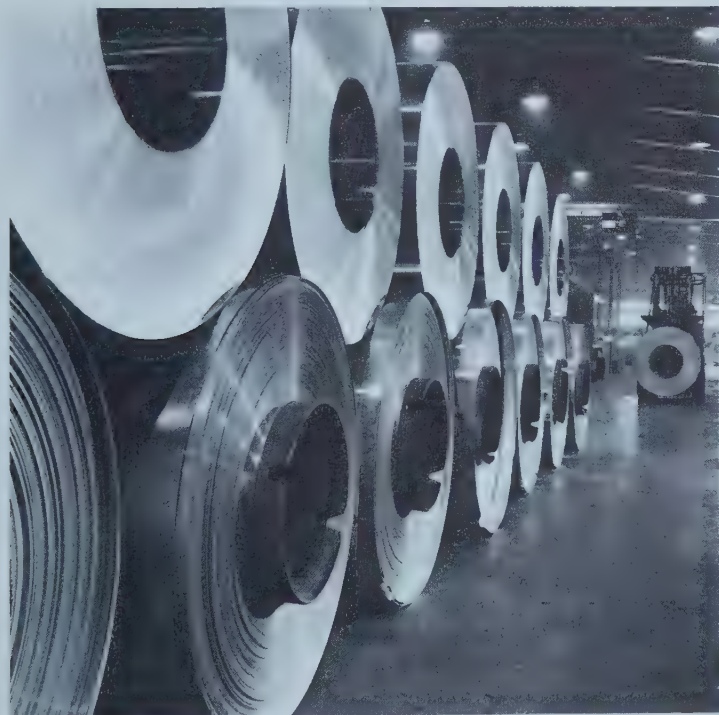


curtain walls. AMAX Aluminum Mill Products has developed special, long-lasting color finishes which have strengthened the division's sales of exterior aluminum to the mobile home and travel-trailer industry.

New products and processes contributing to AMAX Aluminum's growth include tooling plate made by Hunter Engineering's unique continuous casting process, a product gaining wide acceptance in the aircraft industry; a Hunter Engineering stretcher leveling process which produces flatter, easier-to-fabricate aluminum, stainless steel and copper strip; Kawneer's roll-away facade for enclosing shopping malls and a facing system for remodeling older building exteriors; and Huntercomb, a new form of aluminum siding that offers improved strength and insulation properties.

Architectural Concrete

The continued rise in demand for pre-cast concrete sections produced by the Schokbeton process, of which AMAX is the major producer and licensor, indicates the growing acceptance of this product by architects and builders. As a result, sales of AMAX concrete products were higher in 1966. However, operating problems still continue in some units.



Fabrication. Giant coils of continuous-cast aluminum sheet produced by AMAX Aluminum Mill Products (above) will be formed into mobile home siding and roofing and truck-trailer panels.

Engineering. Hunter Engineering designs and builds specialized metals processing equipment. At left, three mills for production of aluminum foil installed in a customer's plant in 1966.

AMAX ALUMINUM COMPANY DIVISION

Stephen A. Furbacher, President

AMAX ALUMINUM MILL PRODUCTS

RIVERSIDE, CALIFORNIA
David Mayers, President

Bloomsburg, Pennsylvania
Dayton, Ohio
Elkhart, Indiana
Marshfield, Wisconsin
Ocala, Florida
Riverside, California
Tulsa, Oklahoma

Decatur Aluminum Company, Inc.
(50%-owned)
Decatur, Alabama

HUNTER ENGINEERING CO.
Riverside, California

AMAX ALUMINUM BUILDING PRODUCTS

Hunter Aluma-Shake, Inc.
Riverside, California

Consolidated General Products, Inc.
Evansville, Indiana

Sun Valley Industries, Inc.
Atlanta, Georgia
Seattle, Washington

AMAX ALUMINUM EXTRUSION PRODUCTS, INC.

ST. CHARLES, ILLINOIS
Lawrence E. Dubé
Vice President & General Mgr.

St. Charles, Illinois
Hernando, Mississippi

APEX SMELTING CO.

CHICAGO, ILLINOIS
Erik Windmiller, President

Chicago, Illinois
Cleveland, Ohio
Long Beach, California

National Metallurgical Corporation
Springfield, Oregon

INTALCO ALUMINUM

(50%-OWNED)
David Mayers, President
Ferndale, Washington

JOHNSTON FOIL COMPANY

ST. LOUIS, MISSOURI
Joe Roberson, General Manager
St. Louis, Missouri

KAWNEER COMPANY, INC.

NILES, MICHIGAN
Charles B. Huizenga, President

Atlanta, Georgia
Bloomsburg, Pennsylvania
Carrollton, Kentucky
Cynthiana, Kentucky
Niles, Michigan
Richmond, California

Kawneer Company Canada Limited
Toronto, Canada

South Bend Screw Products, Inc.
South Bend, Indiana

AMAX ALUMINUM INTERNATIONAL

NEW YORK, NEW YORK
Robert Marcus
General Manager

Alumex, S.A. de C.V.
(40%-owned)
Mexico City, Mexico

AMAX Aluminium G.m.b.H.
Rheydt, Germany

Hunter Aluminium Company Limited

Aston Clinton, Bucks., England

Kawneer de México, S.A. de C.V.
(50%-owned)
Mexico City, Mexico

Kawneer International Ltd.
Niles, Michigan

Kawneer Company Pty. Limited
Merrylands, N.S.W., Australia

Mackamax Aluminium Limited
(50%-owned)

Aston Clinton, Bucks., England
Aldridge, Staffs., England

Showa Kawneer K.K.
(45%-owned)
Tokyo, Japan

BASE METALS

U.S.M.R. DIVISION

United States Metals Refining Company—Production of refined copper at the plant in Carteret, New Jersey, reached 243,000 tons, a gain of about 5% over the prior year. Recovery of metal by-products, including gold and silver, was also above 1965 levels.

AMAX strengthened its market position as a leading producer of specialty copper products by expanded production and applications for OFHC brand copper, copper anodes and special-purpose copper alloys. Sales and technical liaison programs for customers were broadened. Research programs developed a new group of oxygen-free copper alloys with promising technical and commercial applications.

The air and water pollution control programs initiated in previous years were expanded and, in 1966, the plant's new air pollution control facilities performed above expectations in the first full year of operation.

Proposed agreements for mining and reduction facilities in Puerto Rico to produce approximately 35,000 tons of copper per year have been submitted for approval to the Commonwealth authorities. Further engineering and economic studies are under way and when lease negotiations and studies are completed satisfactorily, a decision will be made on the project.

Market Trends in Copper

Domestic demand for copper in 1966 was approximately 20% above 1965, aggravating a supply shortage that was partially alleviated by a United States Government release of 400,000 tons of stockpile copper. For defense purposes, a set-aside program earmarked a portion of United States refined output from domestic ores. In 1967, release of an additional 150,000 tons of stockpile copper has been authorized.

Although Free World mine capacity was increased substantially during the year, supply was curtailed by sporadic political and labor disturbances and production interruptions in the copper-producing regions of Africa and South America.

Major mine expansions are now under way throughout the

copper industry and it is estimated about 400,000 tons of new capacity will be available in 1967. The increase could lead to a better balance between supply and demand in 1967 if Free World production is not hampered unduly by political and labor unrest.

Heath Steele Mines Limited (75% AMAX-owned)—Production from this lead-zinc-copper mine and milling operation in New Brunswick, Canada, continued without interruption during 1966 and work continued on the shaft sinking and mine development program begun in 1965. Further exploration also was undertaken of known mineralized zones at lower levels. When these projects are completed, it is anticipated that production from the mine will be sufficient to provide the ore needed to operate the Heath Steele concentrator at full capacity.

AMAX METAL POWDERS

For the fifth consecutive year, AMAX Metal Powders sales set new records as demand continued to grow for structural parts made from metal powders used in complex automotive and electrical components, and gears and cams for appliances and business machines. To meet this demand, a new grade of iron powder was successfully introduced in 1966 and an expansion program undertaken at the Pyron plant in Niagara Falls, New York, to increase capacity 30% by mid-1967.

Electrolytic copper powder capacity was expanded at U.S.M.R.'s Carteret, New Jersey, plant, and programs for further improvements are under way.

AMAX LEAD & ZINC DIVISION

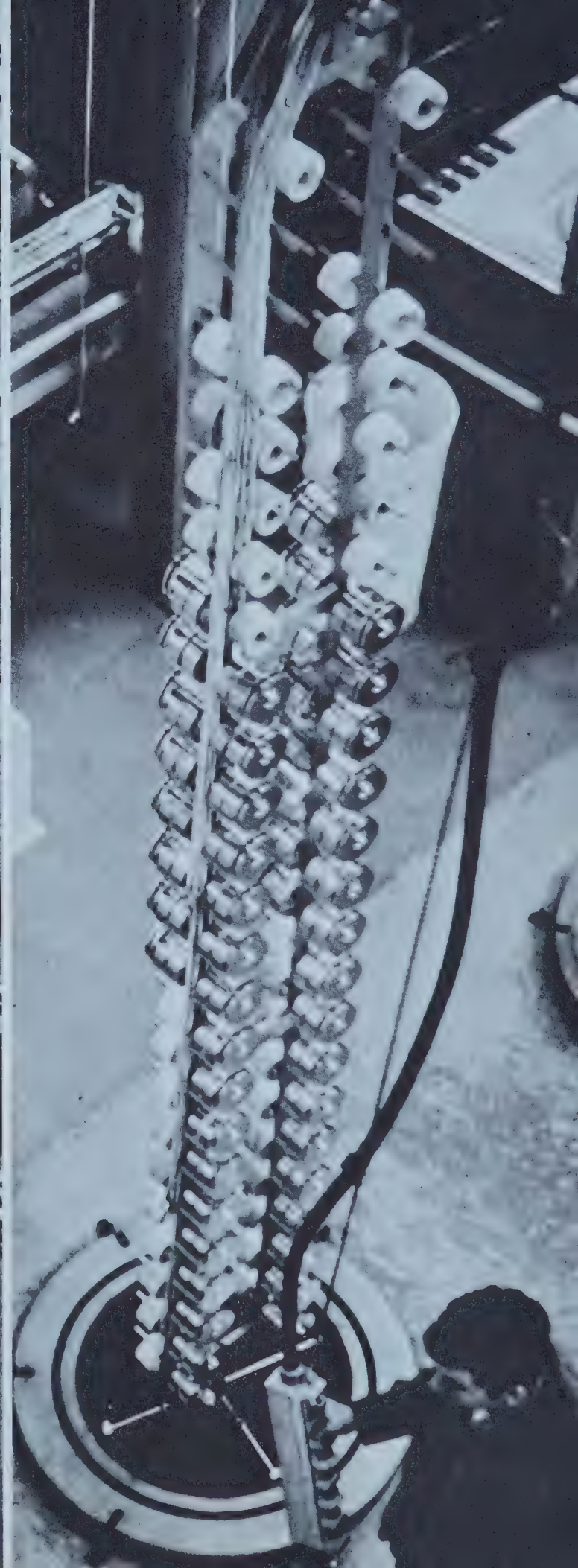
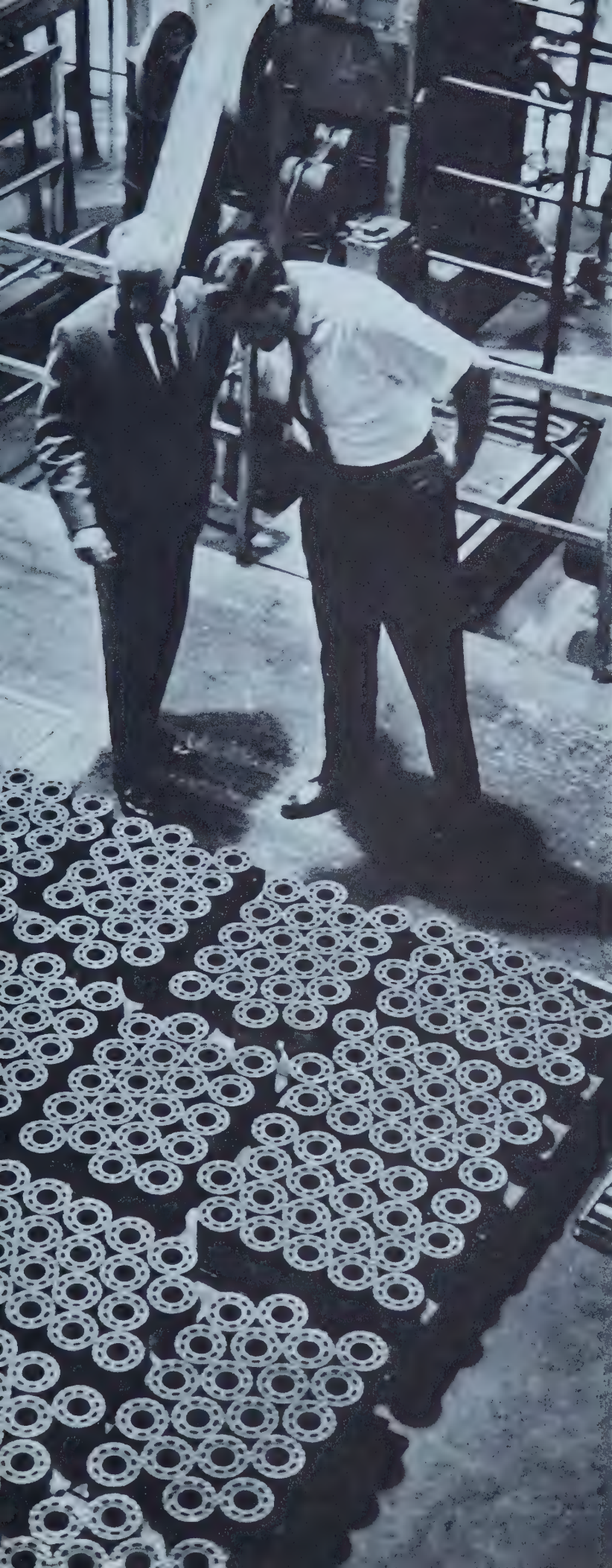
Blackwell Zinc Company, Inc.—Zinc sales continued strong in 1966 and operations at the Company's Blackwell, Oklahoma, smelter were at near capacity levels. Slab zinc production totaled 88,100 tons, compared to 91,000 tons in 1965.

In 1966, capital expenditures were made to rebuild two regular furnace blocks to replace the single condenser furnaces and to improve facilities and increase process control.

Production of cadmium metal and oxide from the Blackwell smelter was 1,212,000 pounds in 1966, slightly under 1965,

Powder Metallurgy. *Metal powders allow industry to produce complex parts economically (example at right), the reason for their fast-growing usage. Demand for AMAX custom-blended metal powders reached a new high in 1966 for the fifth consecutive year.*

Oxygen-Free Copper. *Stanford Linear Accelerator (one section shown at far right) contains 2,000,000 pounds of AMAX OFHC brand copper. Two mile-long "atomic microscope" is world's largest and newest device to study nucleus of the atom.*





and represented about 10% of the United States market. United States and foreign demand for cadmium rose during 1966 and domestic prices increased as a result.

Several new Canadian and United States supply sources for zinc concentrates have begun delivery to Blackwell. Long-term contracts have been secured for future deliveries from new Southeast Missouri mines which are expected to come into production in 1968.

Market Trends in Zinc

Substantially larger requirements of brass manufacturers, increased shipments for new continuous galvanizing lines, and high demand from automotive producers, raised United States slab zinc consumption to an estimated 1,400,000 tons in 1966, a new record. Domestic prices remained stable throughout the year, but foreign producer prices were lowered. United States imports of concentrates, with a zinc content of 521,000 tons, were 22% over 1965. Slab zinc imports in 1966 rose 80% to approximately 275,000 tons, as a result of the stronger United States market and the removal of import quotas in late 1965. In addition, sales of zinc to industry from the Government stockpile in 1966 totaled 42,000 tons.

AMAX Lead Company of Missouri—Construction of the lead mine-mill-smelter complex in Southeast Missouri, owned through subsidiaries by AMAX and the Homestake Mining Company, is substantially on schedule. The mine will operate at a depth of 1,400 feet, and by the end of 1966 shaft sinking had approached the 1,000 foot level. Mining operations are slated to begin in early 1968.

Smelter operations, also scheduled for 1968, will produce 50,000 tons of pig lead annually from AMAX-Homestake concentrates and another 50,000 tons on a toll basis for other mining companies. The smelter will also produce 50,000 tons of by-product sulphuric acid.

Operational control of the project is under the direction of the Missouri Lead Operating Company, an AMAX subsidiary.

Record for U.S.M.R. Copper wirebars at U.S.M.R. Carteret, New Jersey plant are loaded for shipment to toll customers who fabricate electrical wire and cable. In 1966, U.S.M.R. produced a record 243,000 tons of all grades of refined copper products.

UNITED STATES METALS REFINING DIVISION

John Towers, President

UNITED STATES METALS REFINING COMPANY

Carteret, New Jersey

**Copper Smelting and
Refining, Oxygen-Free
Copper**

SALES AND SERVICE
New York, New York

HEATH STEELE MINES LIMITED

Newcastle, N.B., Canada

**Lead-Zinc-Copper Mining
and Milling**

AMAX METAL POWDERS

Iron Powder

Niagara Falls, New York

Nonferrous Powder
Carteret, New Jersey

PONCE MINING COMPANY, INC.
Utuado, Puerto Rico

AMAX LEAD & ZINC DIVISION

Albert E. Lee, Jr., President

BLACKWELL ZINC COMPANY, INC.

Blackwell, Oklahoma

**Zinc Smelting and Refining,
Cadmium**

SALES AND SERVICE
New York, New York

AMAX LEAD COMPANY OF MISSOURI

Missouri Lead Smelting Company
(50%-owned)

MISSOURI LEAD OPERATING COMPANY

Salem, Missouri

**Lead and Zinc Mining,
Lead Smelting and Refining**

SALES AND SERVICE
New York, New York

AGRICULTURAL CHEMICALS AND PETROLEUM

AMAX In Chemicals

Southwest Potash Division—Substantial increases in North American production of muriate of potash, a highly competitive market and resultant price weakness adversely affected Southwest Potash in 1966. Shipments from AMAX's Carlsbad, New Mexico, mine and mill were lower than in 1965.

A shortage of nitric acid caused by a breakdown in a supplier's plant resulted in below design capacity operation at the AMAX potassium nitrate and chlorine plant in Vicksburg, Mississippi. However, sales of Southwest potassium nitrate in 1966 increased 44% to a record high, indicating a growing acceptance of this unique fertilizer material by the agricultural community.

On a long-range basis, demand for plant nutrients, including potash, is expected to accelerate due to the increasingly urgent need to improve agricultural yields to feed the world's multiplying population.

In 1966, further analysis was made of the Company's high grade Bredenburg potash ore body in Saskatchewan, Canada, to determine the economics of the mining project. Land purchases were completed, mineral rights secured and the

project has reached the stage where initial shaft sinking operations could be started once weather permits. Additional studies are currently under way.

AMAX In Petroleum

AMAX Petroleum Corporation—In December, 1966, the Board of Directors approved the sale of the bulk of AMAX oil and gas production properties in the United States, involving a current production of about 13,000 barrels a day and some 700,000 undeveloped acres. This sale is expected to be consummated before mid-1967. AMAX retains its Canadian production, including its recent participation in the Rainbow Lake area of Canada, and all of its producing and non-producing royalty interests in the United States and Canada.

Petroleum operations in 1966 averaged 14,000 barrels a day which, after production payments, left a net of 9,000 barrels a day, about equal to operations in 1965.

AMAX Petroleum, as part of a consortium, holds oil and gas leases in the North Sea granted by the United Kingdom. AMAX Petroleum also conducted explorations in the Netherlands North Sea region and, in February, 1967, announced a joint venture arrangement with six other companies (including two major Dutch firms) for possible lease participation in the Netherlands Continental Shelf area. AMAX Petroleum has operational responsibility for both the United Kingdom and Netherlands ventures.

AMAX CHEMICAL AND PETROLEUM DIVISION

Paul R. Schultz, President

SOUTHWEST POTASH CORPORATION

NEW YORK, NEW YORK

Fred H. Stewart, President

DOMESTIC SALES AND SERVICE Southwest Potash Corporation

New York, New York

POTASH MINING

Carlsbad, New Mexico

POTASSIUM CHEMICALS AND CHLORINE

Vicksburg, Mississippi

INTERNATIONAL SALES AND SERVICE

Latin America, Europe, Africa,
South East Asia, South West Asia,
Far East and Oceania

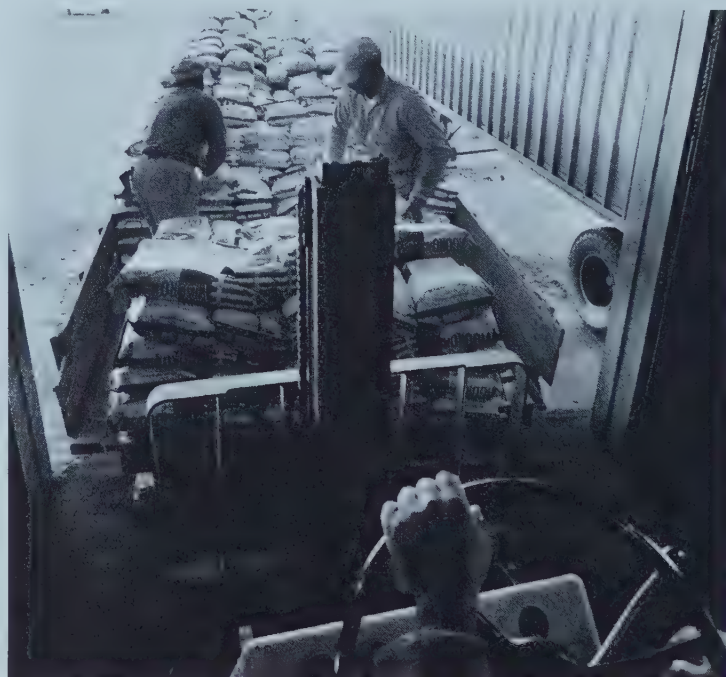
AMAX PETROLEUM CORPORATION

TULSA, OKLAHOMA

Paul R. Schultz, President

Denver, Colorado; Houston,
Texas; Casper, Wyoming; Calgary,
Canada

AMAX PETROLEUM (U.K.) LIMITED LONDON, ENGLAND



Fertilizer Shipment. Southwest Potash sells muriate of potash and potassium nitrate to manufacturers who provide mixed fertilizer to farmers and growers. Exploding world population has accelerated need for plant nutrients to increase agricultural yields.

TEN YEAR SUMMARY • AMERICAN METAL CLIMAX, INC.

	1966	1965	1964	1963	1962	1961	1960	1959	1958	1957
FOR THE YEAR (in millions)										
Net sales of products and services	\$572.6	\$475.0	\$438.2	\$381.9	\$327.2	\$347.4	\$367.7	\$339.6	\$344.3	\$309.2
Net sales by Agency businesses ⁽¹⁾	—	—	—	325.0	315.0	304.0	384.0	407.0	246.0	349.0
Total net sales	<u>\$572.6</u>	<u>\$475.0</u>	<u>\$438.2</u>	<u>\$706.9</u>	<u>\$642.2</u>	<u>\$651.4</u>	<u>\$751.7</u>	<u>\$746.6</u>	<u>\$590.3</u>	<u>\$658.2</u>
Total earnings excl. dividend income	\$ 62.0	\$ 58.9	\$ 45.3	\$ 42.9	\$ 34.6	\$ 45.3	\$ 52.7	\$ 42.9	\$ 22.4	\$ 28.4
Dividend income	20.9	20.8	11.7	10.5	8.1	7.4	10.7	8.6	6.5	13.5
Federal and foreign income taxes	(17.3)	(19.6)	(11.4)	(15.6)	(14.6)	(15.5)	(22.1)	(18.2)	(9.0)	(12.0)
Net earnings	<u>\$ 65.6</u>	<u>\$ 60.1</u>	<u>\$ 45.6</u>	<u>\$ 37.8⁽²⁾</u>	<u>\$ 28.1</u>	<u>\$ 37.2</u>	<u>\$ 41.3</u>	<u>\$ 33.3</u>	<u>\$ 19.9</u>	<u>\$ 29.9</u>
Dividends declared:										
On preferred stock	\$ 1.4	\$ 1.8	\$ 1.8	\$ 1.8	\$ 1.8	\$ 2.0	\$ 2.0	\$ 2.0	\$ 2.0	\$ 2.0
On common stock	28.1	24.3	23.1	20.1	20.0	19.9	17.7	17.0	17.0	17.0
Total	<u>\$ 29.5</u>	<u>\$ 26.1</u>	<u>\$ 24.9</u>	<u>\$ 21.9</u>	<u>\$ 21.8</u>	<u>\$ 21.9</u>	<u>\$ 19.7</u>	<u>\$ 19.0</u>	<u>\$ 19.0</u>	<u>\$ 19.0</u>
Per share of common stock: ⁽³⁾										
Net earnings	\$ 4.33	\$ 4.00	\$ 3.03	\$ 2.50 ⁽²⁾	\$ 1.84	\$ 2.47	\$ 2.77	\$ 2.21	\$ 1.26	\$ 1.97
Dividends	1.90	1.675	1.60	1.40	1.40	1.40	1.25	1.20	1.20	1.20
Capital expenditures	\$ 78.4	\$ 71.4	\$ 32.5	\$ 43.3	\$ 17.3	\$ 22.3	\$ 16.1	\$ 13.3	\$ 15.0	\$ 20.6
Depreciation and depletion	22.2	17.5	16.0	14.7	11.4	10.1	11.2	11.2	10.0	9.9
AT THE YEAR-END (in millions)										
Working capital	\$216.9	\$211.0	\$188.2	\$175.1	\$130.2	\$133.4	\$134.2	\$117.8	\$ 96.6	\$ 97.4
Investments (at book amounts):										
Investments in Africa	30.9	32.8	32.5	31.3	25.5	25.3	25.0	24.3	24.8	24.8
Other investments	25.7	20.6	23.6	22.5	21.5	19.5	15.0	16.4	23.4	23.9
Property, plant and equipment (net)	249.2	198.1	151.2	132.3	105.6	101.6	94.1	93.3	92.2	89.5
Long-term debt	(125.5)	(108.0)	(81.4)	(72.9)	(10.0)	(15.3)	(15.2)	(16.4)	(17.3)	(19.0)
Other liabilities less other assets	(9.3)	(4.5)	(0.2)	2.7	(3.6)	(1.9)	(2.9)	(7.4)	(7.3)	(5.8)
Shareholders' equity	<u>\$387.9</u>	<u>\$350.0</u>	<u>\$313.9</u>	<u>\$291.0</u>	<u>\$269.2</u>	<u>\$262.6</u>	<u>\$250.2</u>	<u>\$228.0</u>	<u>\$212.4</u>	<u>\$210.8</u>

This summary gives retroactive effect to mergers in order to show all years on a comparable basis.

(1)The agency businesses were sold to Roan Selection Trust Limited as of December 31, 1963.

(2)Excludes extraordinary item of \$3,000,000, 21¢ per share, representing net gain on sale of sales agency businesses.

(3)Based on total shares outstanding at the end of each year.

AMERICAN METAL CLIMAX, INC. and its Consolidated Subsidiaries**CONSOLIDATED STATEMENT OF CURRENT AND RETAINED EARNINGS**

For the years ended December 31, 1966 and 1965

	<u>1966</u>	<u>1965</u>
Net sales	<u>\$572,580,000</u>	<u>\$475,020,000</u>
Cost of sales, exclusive of items shown separately	<u>433,910,000</u>	<u>355,080,000</u>
Depreciation and depletion (Page 26)	<u>22,170,000</u>	<u>17,480,000</u>
Selling and general expenses	<u>31,140,000</u>	<u>28,310,000</u>
Expenses for exploration and general research	<u>13,450,000</u>	<u>13,510,000</u>
Taxes other than Federal and foreign income taxes	<u>11,880,000</u>	<u>9,860,000</u>
Total costs applicable to sales	<u>512,550,000</u>	<u>424,240,000</u>
EARNINGS FROM OPERATIONS	<u>60,030,000</u>	<u>50,780,000</u>
Dividend income (Page 5)	<u>20,930,000</u>	<u>20,830,000</u>
Interest income and net profit on investments	<u>8,030,000</u>	<u>12,390,000</u>
Interest on notes payable	<u>(6,120,000)</u>	<u>(4,270,000)</u>
EARNINGS FROM OTHER SOURCES	<u>22,840,000</u>	<u>28,950,000</u>
EARNINGS BEFORE FEDERAL AND FOREIGN INCOME TAXES	<u>82,870,000</u>	<u>79,730,000</u>
Federal and foreign income taxes (Page 26)	<u>17,270,000</u>	<u>19,610,000</u>
NET EARNINGS	<u>65,600,000</u>	<u>60,120,000</u>
Deduct dividends declared for the year:		
Preferred stock	<u>1,390,000</u>	<u>1,800,000</u>
Common stock	<u>28,080,000</u>	<u>24,300,000</u>
Amount added to retained earnings for the year	<u>36,130,000</u>	<u>34,020,000</u>
Retained earnings January 1	<u>223,860,000</u>	<u>189,840,000</u>
RETAINED EARNINGS DECEMBER 31	<u>\$259,990,000</u>	<u>\$223,860,000</u>
Net earnings per common share	<u>\$4.33</u>	<u>\$4.00</u>
Dividends declared per common share	<u>\$1.90</u>	<u>\$1.675</u>

The notes on Pages 26 and 27 are an integral part of these financial statements.

AMERICAN METAL CLIMAX, INC. and its Consolidated Subsidiaries

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

December 31, 1966 and 1965

ASSETS

Current assets	1966	1965
Cash	\$ 13,270,000	\$ 14,550,000
Time deposits and certificates of deposit	28,150,000	80,360,000
Short-term marketable securities, at cost (approximates market)	101,870,000	90,740,000
Accounts receivable less allowance for doubtful accounts	78,880,000	76,470,000
Inventories (Page 26)	78,350,000	74,130,000
Prepaid expenses and other current assets	3,150,000	2,790,000
Total current assets	303,670,000	339,040,000
Long-term receivables, loans, claims and charges	15,270,000	15,380,000
Investments in AMAX Credit Corporation and 50%-owned companies (Page 26)	10,300,000	5,360,000
Investments in other companies (Page 6)	46,310,000	48,030,000
Property, plant and equipment, less accumulated depreciation and depletion (Page 26) ..	249,180,000	198,090,000
TOTAL ASSETS	\$624,730,000	\$605,900,000

LIABILITIES AND SHAREHOLDERS' EQUITY

Current Liabilities		
Accounts payable and accrued liabilities	\$ 64,610,000	\$ 64,710,000
Notes payable (Page 26)	3,820,000	45,540,000
Federal and foreign income taxes	13,260,000	13,080,000
Unearned treatment charges on metals in process	5,070,000	4,740,000
Total current liabilities	86,760,000	128,070,000
Notes payable (Page 26)	125,530,000	108,030,000
Deferred income taxes, reserves, etc. (Page 27)	24,520,000	19,840,000
Total liabilities	236,810,000	255,940,000
Shareholders' equity		
Cumulative preferred stock	32,950,000	40,980,000
Common stock	88,440,000	80,370,000
Capital surplus	7,370,000	6,000,000
Retained earnings	259,990,000	223,860,000
Cost of treasury stock	(830,000)	(1,250,000)
Total Shareholders' equity (Page 27)	387,920,000	349,960,000
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	\$624,730,000	\$605,900,000

The notes on Pages 26 and 27 are an integral part of these financial statements.

NOTES TO FINANCIAL STATEMENTS

FINANCIAL STATEMENTS PRESENTATION:

The consolidated financial statements include the accounts of all subsidiaries in which a voting control of 51% or more is owned, except AMAX Credit Corporation, a wholly-owned finance subsidiary. Effective in 1966, the Company adopted the practice of carrying its investment in AMAX Credit Corporation and 50%-owned companies at the Company's equity in the net assets of these companies. Prior to 1966 such investments were carried at cost. This change decreased the book value of investments and 1966 net earnings by \$490,000.

FEDERAL AND FOREIGN INCOME TAXES:

Investment credit is being accounted for as a reduction of Federal income taxes in the year in which the credit arises. The credit amounted to \$3,860,000 in 1966 and \$2,100,000 in 1965.

Deferred Federal income taxes are applicable primarily to the excess of depreciation deducted for tax purposes over the amounts charged to operations. Such deferred taxes will reduce the provision for income taxes in subsequent years when depreciation provisions charged to operations exceed those allowable for income taxes.

INVENTORIES:

	1966	1965
Metals refined and in-process, at the lower of cost (primarily last-in, first-out) or market (at December 31 market quotations: 1966, \$56,070,000; 1965, \$49,480,000)	\$ 32,030,000	\$ 29,380,000
Metal fabricated products, etc., at the lower of cost (first-in, first-out) or market	30,440,000	29,330,000
Ores, concentrates and chemicals, at the lower of cost or market	7,010,000	6,590,000
Operating supplies, at cost, less reserves	8,870,000	8,830,000
	<u>\$ 78,350,000</u>	<u>\$ 74,130,000</u>

INVESTMENTS IN AMAX CREDIT CORPORATION AND 50%-OWNED COMPANIES:

AMAX Credit Corporation	\$ 1,010,000	\$ 1,000,000
Intalco Aluminum Corporation	3,670,000	520,000
Intalco Tolling Corporation	530,000	20,000
Carborundum Metals Climax, Inc.	2,250,000	3,090,000
Missouri Lead Smelting Company	780,000	—
Mackamax Aluminium Limited	930,000	—
Mt. Newman Iron Ore Company Limited	750,000	730,000
Decatur Aluminum Company, Inc.	380,000	—
	<u>\$ 10,300,000</u>	<u>\$ 5,360,000</u>

In 1966 these investments were carried at the Company's equity in their net assets; in 1965 they were carried at cost.

PROPERTY, PLANT AND EQUIPMENT:

	1966	1965
Mining properties and milling plants ..	\$160,080,000	\$131,380,000
Smelters and refineries	116,170,000	87,550,000
Oil and gas properties	58,720,000	51,270,000
Metal fabricating plants	50,920,000	47,750,000
Chemical plant	8,360,000	8,330,000
Miscellaneous property and equipment	16,390,000	14,790,000
Total Cost	410,640,000	341,070,000
Less accumulated depreciation (1966, \$138,570,000; 1965, \$121,830,000) and depletion	161,460,000	142,980,000
Net Book Value	\$249,180,000	\$198,090,000
Charges to operations for the year:		
Depreciation	\$ 19,750,000	\$ 15,410,000
Depletion	2,420,000	2,070,000
	<u>\$ 22,170,000</u>	<u>\$ 17,480,000</u>

NOTES PAYABLE:

Current:

Borrowings wholly secured by time deposits and certificates of deposit ..	\$ —	\$ 42,000,000
Portion of long-term payable within one year	3,820,000	3,540,000
Total current	\$ 3,820,000	\$ 45,540,000

Long-term:

4½%, payable \$3,000,000 annually 1969 to 1988	\$ 60,000,000	\$ 60,000,000
4.85%, payable semi-annually in ascending amounts from \$425,150 in June, 1967 to \$1,045,800 in June, 1986	27,090,000	27,500,000
5½%, payable semi-annually in ascending amounts from \$109,700 in December, 1967 to \$292,700 in June, 1987	23,500,000	7,500,000
3½%, payable \$750,000 annually to 1970 with a final payment in 1971 of \$3,750,000	6,750,000	7,500,000
5½% paid in 1966	—	4,000,000
4¾%, payable semi-annually in ascending amounts from \$217,790 in June, 1968 to \$305,770 in December, 1977	5,000,000	—
Other long-term	7,010,000	5,070,000
	<u>129,350,000</u>	<u>111,570,000</u>
Less amounts payable within one year	3,820,000	3,540,000
Net long-term	\$125,530,000	\$108,030,000

DEFERRED INCOME TAXES, RESERVES, ETC.:

	1966	1965
Deferred Federal income taxes.....	\$ 15,670,000	\$ 11,840,000
Reserve for pensions for United States hourly paid employees	1,840,000	2,080,000
Miscellaneous reserves and noncurrent liabilities	7,010,000	5,920,000
	<u>\$ 24,520,000</u>	<u>\$ 19,840,000</u>

SHAREHOLDERS' EQUITY:

Cumulative preferred stock, \$100 par value, authorized 1,000,000 shares, issuable in series. Issued and outstanding, 4¼ % convertible series: 1966, 329,451 shares; 1965, 409,802 shares	\$ 32,950,000	\$ 40,980,000
Common stock, \$1 par value, authorized 20,000,000 shares. Issued: 1966, 14,863,901 shares; 1965, 14,626,096 shares	88,440,000	80,370,000
Capital surplus (excess of proceeds over par value of common stock or cost of treasury stock issued upon exercise of stock options)	7,370,000	6,000,000
Retained earnings	<u>259,990,000</u>	<u>223,860,000</u>
	<u>388,750,000</u>	<u>351,210,000</u>
Deduct cost of common stock in treasury: 1966, 28,300 shares; 1965, 43,100 shares	830,000	1,250,000
Shareholders' Equity	<u>\$387,920,000</u>	<u>\$349,960,000</u>

Cumulative Preferred Stock: The 4¼ % convertible series is convertible into common stock of the Company at the rate of 2½ shares of common stock for each share of preferred stock. At December 31, 1966 there were 823,627 shares of authorized and unissued common stock reserved for conversion. The preferred stock may be called for redemption in whole or in part at any time on or after September 1, 1967 at \$105 per share, graduated downward to \$100 per share after September 1, 1977 plus accrued dividends. The holders of this series are entitled to like payment on voluntary liquidation of the Company and to \$100 per share, plus accrued dividends, on involuntary liquidation. The holders are also entitled to one vote for each share on all matters submitted to shareholders of the Company. During 1966, 80,351 shares were converted to common stock and \$8,030,000 was transferred to the Common Stock account.

Dividend Limitations: Agreements entered into in connection with the notes payable impose restrictions (based on income and working capital) on the payments of cash dividends and the reacquisition of the Company's capital stock. At December 31, 1966 approximately \$148,000,000 of retained earnings were free of the restrictions based on income, and working capital exceeded requirements by approximately \$75,000,000.

Stock Option Plans: At December 31, 1966 options were outstanding to purchase 184,313 shares of the Company's common stock under Qualified or Restricted Stock Option Plans. Under the Restricted Stock Option Plan for Key Employees, adopted by the shareholders in 1958, the Company granted to key employees options to purchase common shares of the Company exercisable within seven years from the date of grant at a price not less than 95% of the market value on that date. Under the Qualified Stock Option Plan for Key Employees, adopted by the shareholders in 1964, such options may be granted during the ten-year period to May, 1974, at a price not less than 100% of the market value on the granting date, exercisable within five years from that date.

Changes in stock options during 1966 were as follows:

	Price Range Per Share	Number of Option Shares	
		Unexercised	Available for Future Grants
Balance at January 1	\$18.30-\$43.75	243,429	282,500
Options terminated	\$33.06-\$43.75	(7,363)	7,300
Options exercised	\$18.30-\$43.75	(51,753)	—
Balance at December 31	\$18.30-\$43.75	<u>184,313</u>	<u>289,800</u>

The options all became exercisable prior to December 31, 1966, and expire at various dates to 1972.

EMPLOYEE PENSION PLANS:

Most of the employees of the Company and its subsidiaries are covered under retirement plans. The plans for salaried employees, with minor exceptions, are on a contributory basis, while hourly paid employees are generally covered under noncontributory plans negotiated with unions. During 1966 the charge to income determined on an actuarial basis consistent with prior years for pension costs was \$3,300,000, all of which was funded. The total of the pension funds and balance sheet accruals as of December 31, 1966 was greater than the actuarially computed value of vested benefits for all plans.

GUARANTEES:

At December 31, 1966 the Company and its consolidated subsidiaries were contingent guarantors of notes and other liabilities aggregating \$39,100,000, principally in connection with the 50%-owned Intalco aluminum plant.

LYBRAND, ROSS BROS. & MONTGOMERY

CERTIFIED PUBLIC ACCOUNTANTS

COOPERS & LYBRAND

IN AREAS OF THE WORLD
OUTSIDE THE UNITED STATES

To the Shareholders and Board of Directors
AMERICAN METAL CLIMAX, INC.
New York, N.Y.

We have examined the consolidated statement of financial position of American Metal Climax, Inc. and its Consolidated Subsidiaries as of December 31, 1966 and the related statement of current and retained earnings and the statement of changes in working capital for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We made a similar examination for the year 1965.

In our opinion, the above referred to financial statements (Pages 24 to 27 and Page 7) present fairly the consolidated financial position of American Metal Climax, Inc. and its Consolidated Subsidiaries at December 31, 1966 and 1965 and the results of their operations and changes in working capital for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

Lybrand, Ross Bros. & Montgomery

New York, March 2, 1967.



Incorporated in the State of New York in 1887
1270 AVENUE OF THE AMERICAS • NEW YORK, N.Y. 10020

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Partner, William A. M. Burden & Co.

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Harold K. Hochschild, *Honorary Chairman of the Board
and Chairman of the Compensation Committee*

Carl M. Loeb, Jr.,
*Chairman of the Board,
American Thermocatalytic Corporation*

Ian MacGregor, *President*

Lawrence J. Plym

FOR THE TERM ENDING 1968

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*Chairman, Selection Trust Limited and
Consolidated African Selection Trust Limited*

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General Counsel of the Company*

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Wallace Macgregor, *Senior Executive Vice President*

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and Chairman of the Finance Committee*

Fred Searls, Jr.,
Director, Newmont Mining Corporation

FOR THE TERM ENDING 1969

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Executive Vice President and Treasurer

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GENERAL COUNSEL

Sullivan & Cromwell

CERTIFIED PUBLIC ACCOUNTANTS

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Walter Hochschild

Ian MacGregor

Wallace Macgregor

Lawrence J. Plym

Harold J. Szold

Edward C. Wharton-Tigar

TRANSFER AGENT

Manufacturers Hanover Trust Company

REGISTRAR

Irving Trust Company

